ASSESSMENT OF POVERTY LEVEL AMONG THE RURAL FARMING HOUSEHOLDS IN BOSSO LOCAL GOVERNMENT AREA OF NIGER STATE, NIGERIA

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ABSTRACT

The study examined the assessment of poverty level among the rural farming households in Bosso Local Government Area of Niger State, Nigeria. The specific objectives were to examine the socio-economic profile of the farmers, evaluate access of the farmers to certain social infrastructures and determine the expenditure pattern of the people. Descriptive statistics and multiple regression analysis were used. Personal income of household head and household size were the major determinants of household expenditure. Information was elicited from 100 farmers with the aid of structured questionnaire. 79.6% of the total variation in household expenditure was explained by the regression model, while the remaining 20.4% of the variation was accounted for by the exogenous factors. The World Bank reference lines: $1.08 and $2.15 in 1993 PPP (purchasing power parity) per capital consumption per day was as the bench mark for poverty line. Major problems faced by the rural household include inadequate capital, lack of good road network, marketing of farm produce and insufficient/excessive rainfall. Formulation and implementation of appropriate pricing policy of farm produce should be encouraged. Social infrastructures should be provided and farmers should be given concession in disbursement of loans from financial institutions.

KEYWORDS: poverty level, purchasing power party and income.

INTRODUCTION

Poverty implies a condition in which individuals have little to eat, limited to wear and very rudimentary shelter to live in and there is corollary that the poor person has little or no means of recreation and tourism (Akinbode, 1991). As a financial risk, the poor cannot pay loans in cash which are rarely obtained from financial institutions. Akinbode further explained that rural poverty is manifested clearly in the inadequacies of rural resident requirements such as food, Housing, Medical Care, Education, consumer goods and environmental sanitation. Poverty in Africa is pervasive and predominantly rural. The evidence, however, is that forty percent of the population live below the international poverty line of $ 1.08 per day (in 1985 purchasing power parity dollars), De Haan and Yaqub 1998). This figure is comparable to south Asia, but is rising in sub-Saharan African and falling elsewhere (allowing for the short term effects of the East Asian crisis).

The character of poverty in Africa is changing over time. Worldwide, there have been increases in urban areas, war-affected regions and among women, the landless and the elderly; these tendencies are evident in Africa (Maxwell, 1998). Poverty is one of the most serious problems in Nigeria-today, despite various efforts of the Government from independence to date, poverty among the people of Nigeria has been on the increase. Statistical data available indicate that in 1960, the poverty level in Nigeria covers about 15% of the population and by 1980 it grew to 28%. In 1985, the poverty level was 46% and it dropped to 43% by 1992. By 1996, the federal office of statistics estimated the poverty level in Nigeria at alarming rate of 66% and there are a number of real indications to show that the current poverty level has gone higher. Federal Office of statistics, 1996. Determinants in measuring poverty level include economic, social, cultural and political factors that interact to maintain long term structural disparities in opportunities and resources (Barbara and Valerie, 1999).

The main occupation of rural dwellers is Agriculture. According to Olayemi (1980), he said over Ninety percent of Nigeria total food comes from the rural areas. Some of the characteristics of rural farming area: small and fragmented holdings, low output, the use of crude tools, the practice of shifting cultivation and bush fallowing labour intensive and lack of specialization. In essence, rural farmers engage in subsistence production and their goal is satisfying family foods requirement. Poverty is also defined as a "state of one who lacks a usual or socially acceptable amount of money or material possessions" (Merriam – Webster Collegiate Dictionary, 1995).

The poor also described their interaction with government employees and institutions, revealing another aspect of life in poverty, lack of political power or lack of voice and political rights. Alayande (2003) carried out a vulnerability assessment of Nigeria. The study identified rural Nigerians as the most vulnerable to poverty. Vulnerability has two sides, the external exposure to shocks, stress, and risk, and the internal defenselessness, meaning a lack of mean to cope without damaging loss. Outside sources of risk range from irregular rainfall and epidermis to crime and violence as well as structural and vulnerability of homes and civil conflicts. Thus, the poor powered peace and securely as the highest priority, even over better food and shelter.

Problems encounter by these rural farming household include dangerous working conditions, poor nutrition, lack of preventive heath care and exposure to environmental contaminants. The Specific objectives include to:
- Examine the socio economic profile the people in the study area;
- Determine the expenditure pattern of the people.
- Evaluate access of the people to certain infrastructures;
- Draw policy implications regarding the issue of poverty and vulnerability among the rural farming household from the findings.

METHODOLOGY

The study was carried out between February and August, 2007. Villages were randomly selected in the study, which are area Beji (30), Garatu (15), Gidan Kwano (15), Maikunkele (30), Kodo (10), sample size was 100. Descriptive statistics, regression analysis was used.

$$\text{Regression analysis} = \text{Implicit form Y}$$
$$Y = F (X_1\ X_2\ X_3\ X_4\ X_5\ X_6,\ U)$$

Where Y = Household expenditure, (Education, Health. Transportation, clothing.
$X_1 – X_6$ = explanatory variables
X_1 – Age of household head (m years)
X_2 – Sex of household head
X_3 – Education status of household head
X_4 – Personal income of household head
X_5 – Marital Status
X_6 – Household size
U – Residual error

Explicit Form
Linear regression
$Y = b0 + b_1\ X_1 + b_2\ X_2 + b_3\ X_3 + b_4\ X_4 + b_5\ X_5 + b_6\ X_6 + U$

RESULTS AND DISCUSSION
Socio-Economic Characteristics of the Respondents.
It is important to know the demographic characteristics of the rural farming household. Thus will enable us to deduce reasons for the observed facts and the level of influence these factors have on the poverty level among the rural farming households.

Table 1.0: Socio-Economic Characteristics of the respondents' social feature

Age (years)	Frequency	Percentage (%)
Less than or equal to 30	16	16.0
31 – 40	34	34.0
41 – 50	30	30.0
51 - 60	10	10.0
Above 61	10	10.0
Total	100.0	100.00
Marital status		
Single	11	11.0
Married	89	89.0
Divorced	-	-
Widow	-	-
Total	100.0	100.0
Educational level		
No formal education	25	25.0
Primary level	35	35.0
Secondary level	20	20.0
Post secondary level	9	9.0
Quranic education	11	11.0
Total	100.0	100.0
Household size		
01	11	11.0
2 – 5	20	20.0
6 – 10	50	50.0
11 – 15	19	19.0
Total	100.0	100.0
Occupation		
Farming and trading	80	80.0
Farming and transportation	12	12.0
Farming and civil service	8	8.0
Total	100.0	
Land Acquisition		
By inheritance	98	98.0
By lease	2	2.0
By purchase	-	-
By rent	-	-
Total	100.0	100.0

Source: Field Survey, 2007

Age:
From Table 1.0, respondents whose age range is between 31 – 40 years accounted for 34.0% of the rural farming household whereas between 41 – 50 years accounted for 30.0%. The active group here is between the age of 31 – 40 years which indicates that able bodied men were the active labour force engaged in food production activity. With this, abundant harvest and a profitable enterprise was most probable.

Marital Status
The Table revealed that 89.0% of the rural farming household is married while 11.0% are single. There were no cases of divorced or widowed in the study area. The implication of this is that family labour would be the bulk source of labour for farming activities.

Level of Education
Data in Table 1.0 show the distribution of the rural farming household according to their level of education. 35.0% of the respondents had primary education. 25.0% with no formal education while 20.0% with secondary level

education. So, the literacy level is still very low in the farming communities. According to the World Bank report (1999), Nigeria's Human Development Index was only 0.416. Cited by (NAPEP 2001).

Household Size
Table 1.0 show that 50.0% of the respondents have an household size of 6 – 10. This implies that family labour is a vital source for farming operations.

Occupation
In almost all the rural areas in Nigeria, people engage in different economic activities to earn a living. 80.0% of the respondents were engaged in farming and trading; 12.0% involve in farming and transportation while 8.0% engaged in civil service with farming. This corroborates the findings of Olayemi (1980) that rural areas are the food basket of the nation.

Land Acquisition
Land is a major factor of production 98.0% of the respondent acquired land by inheritance while 2.0% by lease. The implication is that for agriculture to be fully mechanized and commercialized method of land acquisition has to be liberalized.

Standard of living indicators
The indicators of standard of living are potable water supply, electricity, health facilities and good road network among others. The ability of the government to provide the populace with these social amenities is important.
Public poverty refers to the inability of the state to adequately meet the costs that are usually borne by government respect of social amenities provision.

Source of water
Water is the source of life. It is both a domestic and industrial input. Table 2.0 shows the source of water of the respondents.

Table2. 0: Source of water distribution of the respondents.

Source	Frequency	Percentage (%)
Well	45	45.0
Borehole	25	25.0
Stream	20	20.0
River	7	7.0
Tap water	3	3.0
Total	100	100.0

Source: Field Survey, 2007.

From the Table, 45.0% of the respondents obtained their drinking water from well, 25.0% from borehole, stream 20.0%, river 7.0% while tap water accounts for only. The implication is that safe drinking water is scarce in rural areas. This confirms the findings of Adeyeye (2006) that 52 percent of Nigerians drink "dirty" water.

Source of light
This is how people in different localities obtain their light.

Table 3.0: Source of light usage distribution of respondents

Source	Frequency	Percentage (%)
Kerosene	88	88.0
Electricity	12	12.0
Total	100	100.0

Source: Field survey, 2007.

The Table 3.0 indicates that 88.0% of the respondents made use of kerosene lantern while 12.0% used electricity. Electricity is an essential production input and a factor that influences rural – urban migration and a drain of labour force. Akinbode (1991) confirmed the inadequacy of electrical power supply in the rural areas.

Presence of health facilities
Rural areas like the urban counterpart need functional health facilities.

Table 4.0: Presence of health facilities in the respondents' localities.

Source	Frequency	Percentage (%)
Yes	58	58.0
No	42	42.0
Total	100	100.0

Source: Field Survey, 2007.

Table 4.0 indicates that 58.0% of the study areas have health facilities while 42.0% do not have. The implication of this is that most rural dwellers are forced to travel to the nearest town or city in order to get health treatment. Lives might be lost in the course of transportation.

Road Network
A good road network is an important economic facility. It provides a link between food production areas and the consumption centers.

Table 5.0: Presence of good road network distribution

Source	Frequency	Percentage (%)
Yes	46	46.0
No	54	54.0
Total	100	100.0

Source: Field Survey, 2007.

The Table 5 indicates that 54.0% of the respondents affirmed the bad state of road network within villages, to farms and from one locality to another. The consequence of this to the farmers among others include difficulty in transporting goods from the farms to the nearest markets, high transportation cost and a general disincentive to large scale farming.

Table 6.0: Regression Result

Variable	Coefficient	t – Ratio	Decision
-	B_o	5.075	
X_1	B_1 - .089	-.926	Not significant
X_2	B_2 - .021	-.441	Not significant
X_3	B_3 - .042	.738	Not significant
X_4	B_4 - .221	3.254	$P<.05$
X_5	B_5 - .100	1.645	Not significant
X_6	B_6 - .754	6.335	$P<.05$

Table 7.0: Model Summary

Model	R	R square	Adjusted R space	Standard Error of the estimate
1	.892	.796	.783	2692.01398

a.   Predictors: Constant, household size, sex of household head, educational status,
                 Marital status, personal income, age of household head.

b.   Dependent variable: household expenditure.

The Age of household (X_1), sex of household head (X_2), educational status of household head (X_3) and the marital status of the respondents are not significant at 5% level. The personal income of household head (X_4) has a positive coefficient and positive t ratio values. It also has a probability level of $P<.05$. This shows a linear township between personal income level and the household expenditure. According to Keynesian consumption function "the

fundamental psychological law is that men (women) are disposed, as a rule and on average to increase their consumption as their income increase, but not as much as the increase in their income" (Damodar, 1995).

The household size (X_6) has a positive coefficient value. The t ratio is also positive and significant at 5%. This shows that there is a positive relationship between household size and the household expenditure. Thus, an increase in the household size irrespective of living standard would lead to an increase in the household expenditure, all things being equal. Usually, people with small family size could afford a better standard of living compared with a large family size.

The coefficient of determination (r^2) has a value of 0.796. This implies that 79.6% of the total variation in household expenditure is explained by the regression model (explanatory variables). Hence, the regression model is 79.6% fitted. The remaining 20.4% of the variation in household expenditure is explained by the exogenous factors.

The adjusted R square (R^2) has a value of 0.783. It confirms the accuracy of coefficient of determination (0.796). The closer the values of the two, the better fitted the model.

The F value was significant at 5% level. F calculated value (60.488) and F table value (2.96); hence, there is a significant relationship between household expenditure and the explanatory variables.

$$\text{Expenditure per capita} = \frac{\text{Total household expenditure}}{\text{Household size}}$$

With the formula, taking ₦279.50k as the minimum consumption level, about 80% of the respondents fell below the poverty line.

Vulnerability is defined as the likelihood of being adversely affected by a block that usually causes consumption levels or other factors that affect well being to drop (World Bank, 2001). Low output of farmers leads to low income level which also leads to low savings and investment and a lack of social security thereby increasing the vulnerability of farmers to poverty. Rural Nigerians has been identified as the most vulnerable to poverty (Alayande, 2003).

PROBLEMS ENCOUNTERED BY RURAL FARMING HOUSEHOLD
The major problems encountered by these rural farming household include the following with their various percentages.

Problems	Frequency	Percentage	Ranking
Lack of capital	85	60.7	1
Marketing of farm produce	40	28.6	2
Lack of road network	5	3.6	4
Insufficient/excessive train fall	10	7	3
Total	140*	100.0	

Field Survey, 2007
*Multiple responses

Lack of capital is the biggest problem encountered by the rural farming with 60.7% while marketing of their produce which is 28.6% followed by insufficient or excessive rainfall and finally lack of good road network. All these affect their household living.

CONCLUSION AND RECOMMENDATION
Conclusion
Based on the findings of study, assessment of poverty level among the rural farming household, the study identified some constraints which if overcome would ameliorate conditions of the people, improve the general standard of the rural dwellers and boast agricultural production.

Recommendations
Stakeholders at various levels should embark on investing in social infrastructures development of the rural areas.

Government should provide good road network for the disposition of agricultural produce of these rural household.

Encouragement in the area of capital through agricultural banks.

Impacting the ideas and knowledge about cooperatives societies in their various groups (Awareness).

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